

SOD-323 Plastic-Encapsulate Schottky Barrier Diode

FEATURES

- * High Current Capability
- * Low Forward Voltage Drop

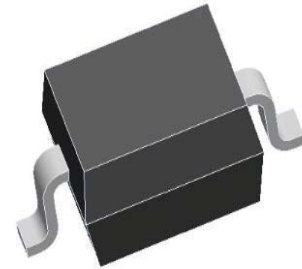
MECHANICAL DATA

- * SOD-323 Small Outline Plastic Package
- * Polarity: Color band denotes cathode end
- * Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

**Marking: SD103AWS: S4
SD103BWS: S5
SD103CWS: S6**



SOD-323

Maximum Ratings & Thermal Characteristics (Ratings at 25 °C ambient temperature unless otherwise specified.)

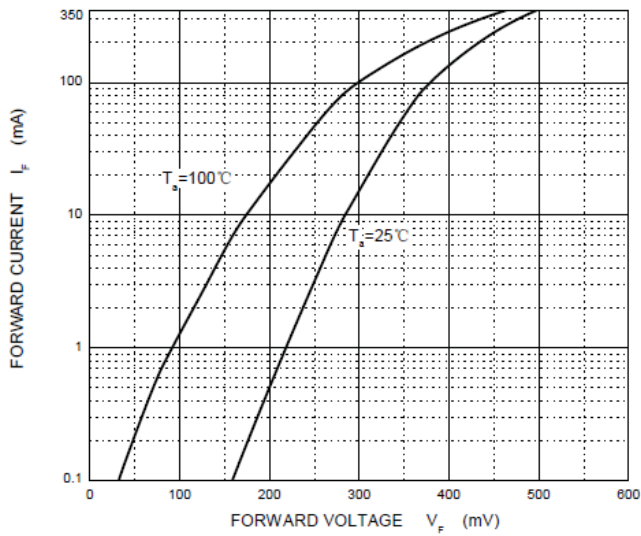
Parameters	Symbol	SD103AWS	SD103BWS	SD103CWS	Unit
Maximum repetitive peak reverse voltage	VRRM	40	30	20	V
Maximum RMS voltage	VRMS	28	21	14	V
Maximum DC blocking voltage	VDC	40	30	20	V
Maximum average forward rectified current	IFM	350			mA
Peak forward surge current 8.3 ms single half sine-wave	IFSM	1.5			A
Power Dissipation	PD	200			mW
Typical thermal resistance	RθJA	500			°C/W
Operating junction temperature	Tj	125			°C
Storage temperature range	TSTG	-50			°C

Electrical Characteristics (Ratings at 25 °C ambient temperature unless otherwise specified).

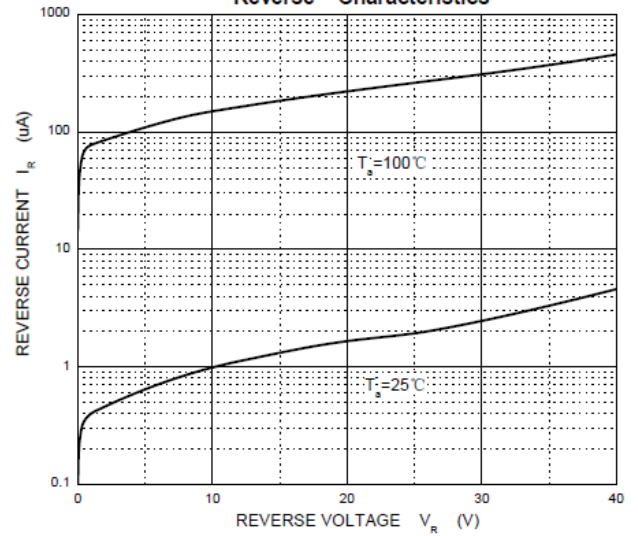
Parameters	Symbol	Test conditions	SD103AWS	SD103BWS	SD103CWS	Unit
Maximum forward voltage	VF	IF = 20mA IF = 200mA	0.370 0.600			V
Maximum reverse breakdown voltage	VR	IR=100uA	40	30	20	V
Maximum reverse current	IR	VR=30V SD103AWS VR=20V SD103BWS VR=10V SD103CWS	5.0			uA
Type junction capacitance	Cj	VR =0V, f = 1MHz	50			pF
Reverse recovery time	Trr	IF=IR=200mA, Irr=0.1xIR,RL=100 Ω	10			ns

RATING AND CHARACTERISTICS CURVES (SD103AWS THRU SD103CWS)

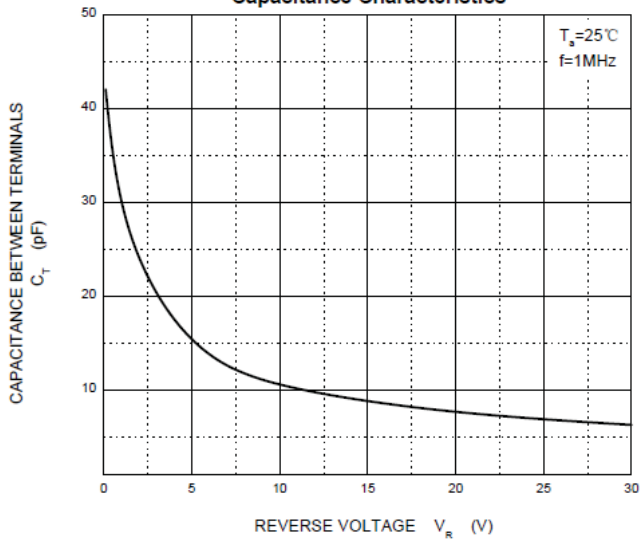
Forward Characteristics



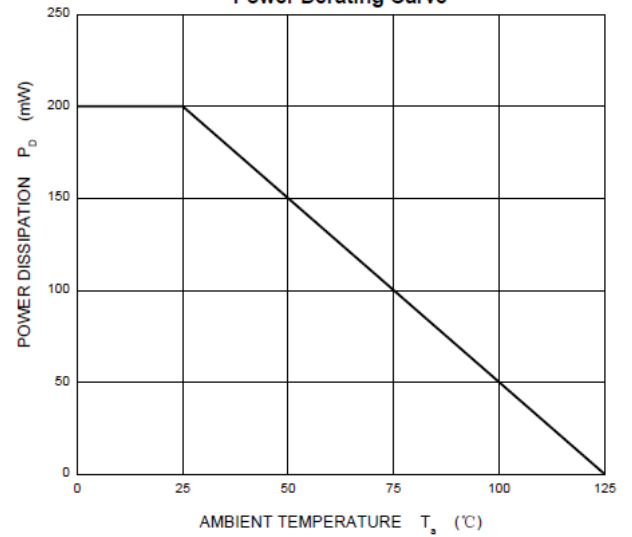
Reverse Characteristics



Capacitance Characteristics



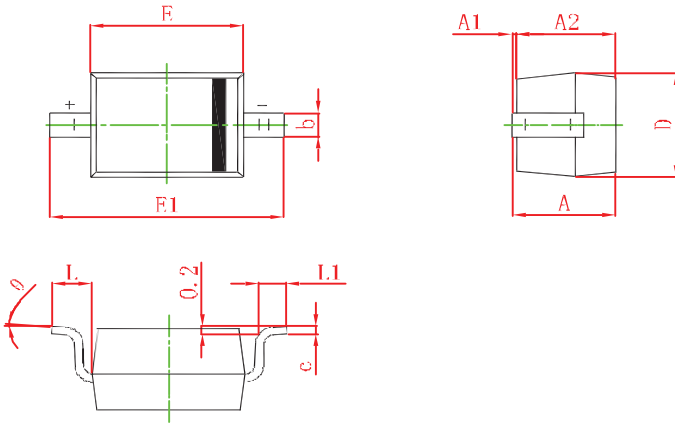
Power Derating Curve



SOD-323 PACKAGE OUTLINE

Plastic surface mounted package

SOD-323



Symbol	Min.(mm)	Max.(mm)
A		1.000
A1	0.000	0.100
A2	0.800	0.900
b	0.250	0.350
c	0.080	0.150
D	1.200	1.400
E	1.600	1.800
E1	2.500	2.700
L	0.475REF	
L1	0.250	0.400
θ	0°	8°

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
SOD-323	-T	3,000	15,000	---	---	178	390*205*31	120,000	5.17

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